

**What is claimed is:**

1. A method of manufacturing a trim panel assembly for the interior of a vehicle having integrated trim panel components, said method comprising the steps of:

providing a die including a pair of die halves cooperating to define a mold cavity to form a interior trim panel, at least one of said die halves including a surface within said mold cavity defining an A-surface, one of said mold cavities including a plurality of recesses having a predetermined shape;

placing at least one trim panel component into said corresponding recess within said mold cavity;

closing said first and said second die halves;

forming a rigid substrate having an A-side surface visible to the interior of a vehicle when secured to a vehicle door in said mold cavity by injecting a molten thermoplastic material having a predetermined pressure less than the maximum clamp pressure of said die into said mold cavity so as to fill said mold cavity; and

bonding said molten thermoplastic material to at least one trim panel component within said mold cavity while said rigid substrate is formed.

2. The method as set forth in claim 1 further including the steps of:

at least partially curing the molten thermoplastic material in said mold cavity to form a finished molded interior trim panel having at least one trim panel component bonded thereto; and

removing the molded interior trim panel assembly having at least one integrated trim panel component from said mold cavity.

3. The method as set forth in claim 1 wherein the step of placing at least one trim panel component into said corresponding recess within said mold cavity further includes providing at least one trim panel component having a contact surface adapted to bond said trim panel component to said molten thermoplastic material rigid substrate forming a rigid substrate.

4. The method as set forth in claim 3 wherein the step of closing said first and said second die halves further includes closing the die so as to permit said contact surface of said trim panel component to operatively engage said molten thermoplastic material.

5. The method as set forth in claim 4 wherein the step of forming a rigid substrate includes injecting a thermoplastic material at a temperature no greater than the melting point of said contact surface.

6. The method as set forth in claim 1 wherein the step of placing at least one trim panel component into said corresponding recess within said mold cavity further includes placing a trim panel component having at least one surface visible to a vehicle interior into said corresponding recess within said mold cavity and matching said visible surface of said trim panel component to the A-surface of said mold cavity.

7. The method as set forth in claim 1 wherein the step of bonding said molten thermoplastic material to at least one trim panel component within said mold cavity further

includes bonding said thermoplastic material to said trim panel component where the bond line is not visible along the A-surface of said formed rigid substrate.

8. The method as set forth in claim 1 wherein the step of bonding said molten thermoplastic material to at least one trim panel component within said mold cavity further includes bonding said thermoplastic material to said trim panel component where the visible surface of said trim panel component and the A-side surface formed by said thermoplastic material bond along a substantially similar plane to provide a compact bond line reveal.

9. A trim panel assembly for the interior of a vehicle having integrated trim panel components comprising:

at least one trim panel component adapted for placement in a mold cavity, said trim panel component adapted for use vehicle trim panel applications having at least one surface visible from a vehicle interior;

a substrate adapted for use as a vehicle interior door trim panel formed from injection of a rigid forming polymer into a mold wherein said formed substrate operatively engages said trim panel component,

said substrate having a first side and a second side opposite said first side, said first side defining a A-side surface exposed to the vehicle interior when secured to a vehicle door, said second side defining a B-side surface concealed from the vehicle interior when secured to a vehicle door.

10. The trim panel assembly as set forth in claim 9 wherein said trim panel component and said substrate are operatively engaged such that said visible surface of said trim panel component and said A-side surface of said substrate are visible when secured to a vehicle door.

11. The trim panel assembly as set forth in claim 9 wherein said trim panel component includes at least one contact surface operatively engaged to said substrate and said substrate includes a terminal edge adjacent said trim panel component.

12. The trim panel assembly as set forth in claim 11 wherein said contact surface bonded to said B-side surface of said substrate adjacent said terminal edge, said contact surface substantially concealed from the vehicle interior when secured to a vehicle door.

13. The trim panel assembly as set forth in claim 11 wherein said contact surface having a first side defining an A-side and a second side defining a B-side opposite said first side, said B-side bonded to said substrate adjacent said terminal edge, said A-side exposed to the vehicle interior when secured to a vehicle door.

14. The trim panel assembly as set forth in claim 11 wherein said contact surface is a lip disposed about the perimeter of said trim panel component adapted to bond said trim panel component to said substrate while formed.

15. The trim panel assembly as set forth in claim 11 wherein said contact surface is a plurality of protrusions adapted to bond said trim panel to said substrate while formed.

16. The trim panel assembly as set forth in claim 9 wherein said trim panel component is a bolster adapted to provide a soft-touch, cushion-like feature.

17. The trim panel assembly as set forth in claim 9 wherein said trim panel component is a map pocket adapted to retain articles therein.

18. The trim panel assembly as set forth in claim 9 wherein said trim panel component is a speaker cover.

19. The trim panel assembly as set forth in claim 9 wherein said trim panel component is a door latch assembly adapted to facilitate ingress and egress to the vehicle interior.